

IN THE CLAIMS

1 (Currently Amended). A method comprising:

searching for dirty data to write back;

dynamically determining whether two logical blocks of data that are dirty are sufficiently proximate to write them back to the disk drive write back in the same operation; and writing back to a disk data from two different logical block addresses in two non-sequential writes ~~as one write request.~~

2 (Original). The method of claim 1 including identifying dirty logical data.

3 (Original). The method of claim 2 including identifying dirty logical block addresses.

4 (Currently Amended). The method of claim 1 including writing back two flushing different cache lines in the same operation write request.

5 (Original). The method of claim 1 including writing back data from a non-volatile cache.

Claim 6 (Canceled).

7 (Original). The method of claim 6 including searching in a first direction.

8 (Original). The method of claim 7 including searching in a second direction opposite the first direction.

9 (Original). The method of claim 6 including searching by sets and ways in a cache organized in sets and ways.

Claim 10 (Canceled).

11 (Currently Amended). An article comprising a medium storing instructions that, if executed, enable a processor-based system to:

search for dirty data to write back;
dynamically determine whether two logical blocks of data that are dirty are sufficiently proximate to write them back to the disk drive write back in the same operation; and
write back to a disk data from two different logical block addresses in non-sequential writes as one write request.

12 (Original). The article of claim 11 further storing instructions that, if executed, enable the processor-based system to identify dirty logical data.

13 (Original). The article of claim 12 further storing instructions that, if executed, enable the processor-based system to identify dirty logical block addresses.

14 (Original). The article of claim 11 further storing instructions that, if executed, enable the processor-based system to flush different cache lines in the same operation.

15 (Original). The article of claim 11 further storing instructions that, if executed, enable the processor-based system to write back data from a non-volatile cache.

16 (Original). The article of claim 11 further storing instructions that, if executed, enable the processor-based system to search for dirty data to write back.

17 (Original). The article of claim 16 further storing instructions that, if executed, enable the processor-based system to search in a first direction.

18 (Original). The article of claim 17 further storing instructions that, if executed, enable the processor-based system to search in a second direction opposite the first direction.

19 (Original). The article of claim 16 further storing instructions that, if executed, enable the processor-based system to search by sets and ways in a cache organized in sets and ways.

20 (Original). The article of claim 16 further storing instructions that, if executed, enable the processor-based system to determine whether two logical blocks of data that are dirty are sufficiently proximate to write them back to the disk drive in the same write back operation.

21 (Currently Amended). A system comprising:

a cache;

a disk drive coupled to said cache; and

a controller to search for dirty data to write back, dynamically determine whether two logical blocks of data that are dirty are sufficiently proximate to write them back to the disk drive write back in the same operation, and write back to a disk data from two different logical block addresses in two non-sequential writes as one write request.

22 (Original). The system of claim 21, said controller to identify dirty logical data.

23 (Original). The system of claim 22, said controller to identify dirty logical block addresses.

24 (Original). The system of claim 21, said controller to flush different cache lines in the same operation.

25 (Original). The system of claim 21, said controller to write back data from a non-volatile cache.

26 (Original). The system of claim 21, said controller to search for dirty data to write back.

27 (Original). The system of claim 26, said controller to search in a first direction.

28 (Original). The system of claim 27, said controller to search in a second direction opposite the first direction.

29 (Original). The system of claim 26, said controller to search by sets and ways in a cache organized in sets and ways.

30 (Original). The system of claim 26, said controller to determine whether two logical blocks of data that are dirty are sufficiently proximate to write them back to the disk drive in the same write back operation.